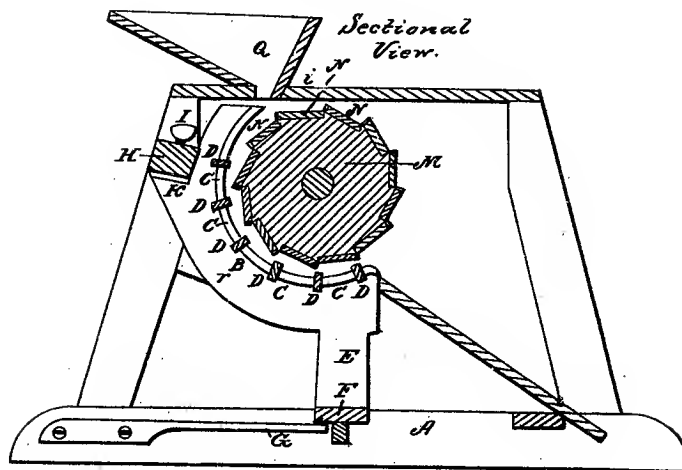


### Clover Huller.

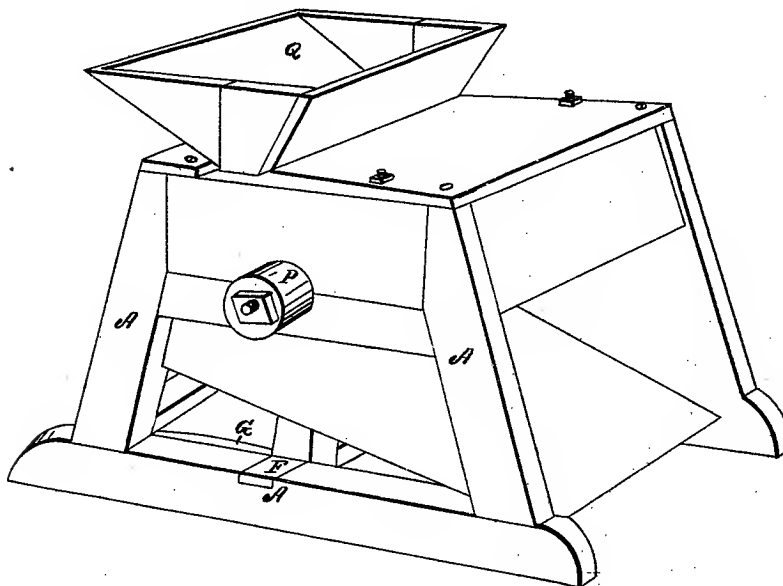
No. 515.

Patented Dec. 15, 1837.

*Fig: 2.*



*Fig. 1.*



# UNITED STATES PATENT OFFICE.

JONATHAN BROOKS, OF NEAR BROWNSBURG, VIRGINIA.

## MACHINE FOR THRESHING CLOVER-SEED.

Specification of Letters Patent No. 515, dated December 15, 1837.

*To all whom it may concern:*

Be it known that I, JONATHAN BROOKS, of near Brownsburg, in the county of Rockbridge and State of Virginia, have invented a new and useful Machine for Threshing out Clover-Seed, which is described as follows, reference being had to the annexed drawings of the same, making part of this specification.

A, Figure 1, represents the frame constructed of pieces of timber of suitable size for the purpose intended framed together in a proper manner.

B, Fig. 2, the concave. This is composed of two curved ribs *r, r*, Fig. 2, the segment of a circle, placed parallel to each other, one on each side of the frame and inside thereof. Extending from the one to the other are laid several slats C parallel to each other screwed at their ends to the concave parts of the two curved ribs, having between each pair of slats a piece of sole leather, or hide, or other suitable elastic substance D extending across the concave and projecting beyond the face of the same a suitable distance for the projection of the cylinder (hereafter described) to strike against in threshing out the seed from the clover heads, and projecting also below the concave to allow of a renewal of the upper projecting edges when worn away.

In forming the concave a slat is screwed to the curved ribs at the lower end thereof, then a piece of leather, or other suitable substance is nailed to the edge of this slat, projecting beyond the surface of the concave on either side a sufficient distance, then another slat is placed against this piece of leather and screwed to the curved segment, then another piece of leather is nailed to the edge of this last mentioned slat in the manner described with the last piece of leather then another slat and piece of leather are arranged, and so on until the concave is completed.

The strips of leather projecting below the slats will allow of their being advanced as they wear away on top by merely drawing the nails and inserting them in another place. The edges of the slats to which the leather is nailed are made flaring toward the cylinder to allow a greater yielding in the strips of leather.

The lower ends E of the curved ribs forming the sides of the concave are turned

downward vertically and tenoned into a cross bar F resting on the ends of two parallel springs G fastened near their other ends to the insides of the two longitudinal sills, for the purpose of allowing the concave to recede from the cylinder in case too large a quantity of straw, or any hard substance, should be admitted between them, said cross timber F moving vertically in notches cut in the sills.

On the side of the machine where the concave is placed, between the two posts of the frame and near the top thereof is a cross bar H through which set screws I pass—the points being made to bear against offsets or projections K on the curved ribs of the concave, which screws may be receded as the leather strips wear away, in order to bring the concave nearer to the cylinder the springs, G, causing the concave to rise which operation is repeated until the leather is entirely worn down even with the surface of the concave when the strips must be renewed.

M, the cylinder. This is composed of two circular heads, fixed on a horizontal shaft lying across the frame and turning in boxes in the same. In the periphery of each head are cut about twenty triangularly shaped notches into which are placed parallel slats N, screwed or bolted fast to the heads forming projections that serve as the beaters and where they come down in contact with the strips of leather of the concave, are faced with iron to render them durable. The cylinder turns in the concave, in manner of the common threshing machine. On the end of the shaft of the cylinder is a pulley P, Fig. 1, around which is passed a board extending from the driving power for propelling the machine.

The hopper Q is placed on the top of the frame to receive the heads of clover and straw previous to passing between the cylinder and concave to be threshed.

The invention claimed and desired to be secured by Letters Patent consists in—

The concave of strips of leather in combination with a cylinder having beaters constructed substantially as herein described.

JONATHAN BROOKS.

Witnesses:

WM. P. ELLIOT,  
WM. BISHOP.